

**AMENDMENTS TO THE CLAIMS**

1. (Cancelled)

2. (Previously Presented) A regenerator disposed on a flow passage for a working gas, formed by stacking a film-shaped resin member in a direction crossing a flow direction of the working gas,

said resin member including a projection formed by subjecting a surface of said resin member to plastic deformation and having an opening on its tip, and

said projection providing a gap between layers of said stacked resin member.

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) The regenerator according to claim 2, wherein A  
~~regenerator disposed on a flow passage for a working gas, formed by stacking a film-shaped~~  
~~resin member in a direction crossing a flow direction of the working gas,~~

~~—said resin member including a projection formed by subjecting a surface of said resin~~  
~~member to plastic deformation, and~~

on the surface of said resin member, the projection in a prescribed region are adjusted  
~~being adjusted~~ to have a height different from a height of the projection in another region.

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) The regenerator according to claim 2, wherein  
said regenerator is arranged between a compression space and an expansion space of a  
Stirling refrigerator, and A regenerator disposed on a flow passage for a working gas flowing

~~between a compression space and an expansion space of a Stirling refrigerator, formed by stacking a film-shaped resin member in a direction crossing a flow direction of said working gas;~~  
~~—— said resin member having a plurality of projections on its surface,~~  
~~—— said plurality of projections providing a gap between layers of said stacked resin member,~~  
and

on the surface of said resin member, the number of the projections per unit area is increased ~~being increased~~ as the distance from said expansion space decreases, compared to the side of said compression space.

9. (Previously Presented) A Stirling refrigerator, provided with a regenerator that is disposed on a flow passage for a working gas and is formed by stacking a film-shaped resin member in a direction crossing a flow direction of the working gas,

said resin member including a projection formed by subjecting a surface of said resin member to plastic deformation and having an opening on its tip, and

said projection providing a gap between layers of said stacked resin member.

10. (Currently Amended) The Stirling refrigerator according to claim 9, wherein  
~~A Stirling refrigerator, provided with a regenerator that is disposed on a flow passage for a working gas flowing between a compression space and an expansion space and is formed by stacking a film-shaped resin member in a direction crossing a flow direction of said working gas;~~  
~~—— said resin member having a plurality of projections on its surface,~~  
~~—— said plurality of projections providing a gap between layers of said stacked resin member,~~  
and

on the surface of said resin member, the projection in a prescribed region being adjusted to have a height that is different from a height of the projection in another region.

11. (Currently Amended) The Stirling refrigerator according to claim 9, wherein  
said Stirling refrigerator includes a compression space and an expansion space, and A  
~~Stirling refrigerator, provided with a regenerator that is disposed on a flow passage for a working~~

~~gas flowing between a compression space and an expansion space and is formed by stacking a film-shaped resin member in a direction crossing a flow direction of said working gas,~~

~~—— said resin member having a plurality of projections on its surface,~~

~~—— said plurality of projections providing a gap between layers of said stacked resin member,~~  
and

on the surface of said resin member, the number of the projections ~~said projections~~ per unit area is increased ~~being increased~~ as the distance from said expansion space decreases, compared to the side of said compression space.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Canceled)

18. (Cancelled)

19. (Cancelled)